DOCUMENT RESUME

ED 350 599 CS 213 358

AUTHOR Latchaw, Joan S.
TITLE Where Is the "Critical" in Critical Thinking?
PUB DATE Mar 92
NOTE 18p.; Paper presented at the Annual Meeting of the Conference on College Composition and Communication (43rd, Cincinnati, OH, March 19-21, 1992).
PUB TYPE Speeches/Conference Papers (150) -- Information Analyses (070)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Controversial Issues (Course Content); *Critical Thinking; Educational Trends; Elementary Secondary Education; Higher Education; *Politics of Education; Textbook Content; Textbook Publication; *Textbooks; Thinking Skills; Writing Processes
IDENTIFIERS *Writing Contexts

ABSTRACT

Because it has been overworked, underanalyzed, and undefined, critical thinking has come to mean anything or nothing. The best work on critical thinking imagines it as an act of composing and revising. Definitions of critical thinking have undergone a historical evolution--from general problem-solving "skills" to a complex of higher-order reasoning strategies. When critical thinking in composition is well grounded in theory, exciting pedagogies emerge. Basic errors in textbooks hinder critical thinking; more reliable textbooks often give only a nod to critical thinking. All too often, texts merely undergo a facelift to make them more marketable. John Patrick recommends that students learn to develop critical attitudes by applying issues of constitutional democracy to the real world. However, the critical inquiry he advocates is often construed as dangerous: (1) issue-centered classrooms emphasize controversy; (2) teachers are unprepared and uncomfortable with inquiry methods; and (3) schools have traditions and administrations that are not easily changed. Despite these problems, some educators are inventing new pedagogies and designing research consistent with critical thinking theory. Critical thinking's future depends on the strength of further inquiry to reveal whether this movement is trickling down into the nooks and crannies where it is truly useful. (A 15-item annotated bibliography is attached.) (RS)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED385549

PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Joan S. Latchaw

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☑ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

Where is the "critical" in critical thinking?

Joan S. Latchaw

152133S5S

BEST COPY AVAILABLE

Joan S. Latchaw

Where is the "critical" in critical thinking?

Critical thinking, we are told, and as evidenced by over 3000 entries in ERIC, is good for us. It is, as John McPeck says, a bit like favoring freedom, justice or a clean environment. It is advertised as a curative for all manner of ills. Everyone sermonizes. Academics, like most other people, float happily along with current trends. However, there is danger of getting stuck in a mudbank or floating along on someone else's raft. In either case, meaning is sacrificed.

Critical thinking may even be counterproductive in some cases. As a poet, when I begin composing, I want the analytical, judgmental part of my mind to recede. Suppressing judgment may also be necessary or desirable in more formal kinds of tasks--at least in the initial stages.

Because it has been overworked, underanalyzed, and undefined, critical thinking has come to mean anything or nothing. A new textbook entitled The Literate Mind: Reading Writing and Critical Thinking, has no entries for critical thinking in the index and only one reference to it in the entire book. The raft this author was floating on was the Toulmin model of argument, rhetorical strategies, and the modes--pretty standard fare.

Similarly, at a recent CCCC convention in a session called "Critical Thinking and Basic Writing," the popular presentation demonstrated how basic writers planned and produced a research paper by doing library research and interviewing experts. This "news" (a standard senior high school project) was so revolutionary that one member of the audience said he would have to rethink his whole notion of Basic Writing--by which he meant basic skills. As a reader of journals and a teacher whose

CS213358

assignments ask basic writers to respond to Borges, John Berger, and Lewis Thomas, I felt like I was swimming upstream.

The best work I've found on critical thinking (in social studies, library science, reading theory, history, composition) avoids mere reflection. Rather it imagines critical thinking as an act of composing and revising. For instance, Haas and Flower, used a construction metaphor as an investigative tool of inquiry in their study of rhetorical reading strategies. Each discipline, then, must interrogate the meaning of critical thinking according to its knowledge base and habit of mind. Problem solving in math may have little relationship to decision making in social studies, which may account for a lack of transfer across domains.

My presentation will focus on definitions of critical thinking, theories of critical thinking, emerging pedagogies, the future of critical thinking and suggestions for further research.

Definitions of critical thinking have undergone a historical evolution--from general problem solving "skills" to a complex of higher order reasoning strategies. Edys Quellmalz (in my annotated bibliography) gives a good overview. I agree with Siegel and Carey who say educators must "think about all the factors and behaviors that [the] process [of critical thinking] can involve." These include inquiry, hypothesizing, examining assumptions, weighing alternative interpretations, evaluating, decision-making, drawing conclusions, and meta-cognition. This listing is, of course, an oversimplification, and does not imply a sequence or method of operations. Cornbleth, a major contributor to critical thinking theory, identifies six elements of inquiry, some of which are in my list; however, some social studies experts claim inquiry works against decision making

and citizen action. Reading theorists stress meta-cognition, interpretation and drawing conclusions. Physicists on problem-solving.

Jere Brophy's article, "Teaching Social Studies for Understanding and Higher-Order Applications," is one of the most impressive studies I came across: Brophy first defines critical thinking as it relates to his field: a process of determining the authenticity, accuracy or worth of information or knowledge claims, a process of raising and pursuing questions about our own and others' claims, definitions, evidence and beliefs. Next, he determines what constitutes knowledge within his particular discursive field. Experts generally agree that knowledge in social studies should be organized around powerful concepts like rules and norms, change, values, issues. Brophy's method itself reflects critical inquiry; he states that certain criteria are needed to **delineate and justify** these powerful concepts. Is the concept generalizable from a great number of examples, is it valid in terms of agreed upon definitions? Is it contemporaneous? Brophy is careful to discuss each criterion in terms of its advantages and disadvantages. Such inquiry, he claims, generates theory-based curricula which will result in creating citizens who are competent, reflective, and concerned (these terms are defined) and who can apply knowledge to a variety of issues and tasks.

While critical thinking in composition is often ill-conceived and imitative, when it is well grounded in theory, exciting pedagogies emerge. One theory holds that we should model our methods on an expert rather than a novice model. This means that work students engage in should be "real work"--that professionals and academics would find respectable. (I will return to this idea in the textbook section.) Toni-Lee Capossela, in a composition course, takes sociolinguistics as the subject under

investigation. The term *investigation* is pivotal since it signifies inquiry (an aspect of critical thinking I have argue for), rather than knowledge-telling.

Students use Peter Farb's Word Play to learn the terms and conventions of sociolinguistics, and to "test the premises of the discipline against their own experience" (76). They track down Farb's sources, then test his claims against other research and against their own investigations into particular speech communities. Thus the course sets up a "legitimate research situation for students," an approach which assumes that basic thinking/basic skills do not precede critical thinking. Although Caposella includes no student writing as evidence, students perceived that they had done significant work.

To behave as experts, to investigate "real questions" students must learn to read like experts. Thus, more research is combining reading, writing and critical thinking theories. These are merged into a powerful pedagogy in Donahue and Quandahl's course for basic writers. They insist that "the same questions asked by critical theory--what reading is, what the status of a text is, how we clarify approaches to interpretation--be asked by composition teachers.

Donahue and Quandahl chose Freud's case study of Dora because it conflates reading and writing: Freud reads his clients' stories by rewriting them. The authors teach about writing and meaning by revealing both the "text's insights and its blindness." In a series of three assignments, the students were asked to analyze the case study from different perspectives--Dora's, Freud's, and then finally their own. Composing a reading in stages involved important aspects of critical thinking: holding off on decision making by considering various alternatives, questioning the

text, and testing the assumptions underlying both writing and psychological investigation. The authors' work makes a significant contribution both theoretically and pedagogically since it is a demonstration that "interpretive reading requires first a writing and then a rewriting of a text" (56). What is particularly powerful in Donahue and Quandahl's course is the success they and their students experienced. At first the reading seemed far too difficult and the writing impossible, but with strategies and patience these "remedial" students achieved an impressive degree of literacy. They performed better on the exit exam than previous classes and reported better success in reading difficult texts in later semesters.

At Shepherd College, a sociology professor has enlisted his senior seminar students in a large-scale assessment project involving a FIPSE grant. They were instrumental in implementing and designing the program. Without their help, assessment would probably have been curtailed due to lack of funding and trained personnel.

If time permitted, I could cite more definitions, theories and practical applications proving critical thinking is indeed good for us.

But there are larger concerns which gnaw away at my convictions. There is evidence that we don't want a nation of critical thinkers. A provocative analysis of Becoming a Nation of Readers reveals that metaphors applied to reading are antithetical to critical thinking theory. For instance, *journey* suggests a correct, linear path with a specified goal; reading as training implies a skills approach; educational policy as quality control suggests an input/output model; reading instruction as business (efficiency) implies time-on task; and reading problems as disease

(remediation) implies illness. These metaphors ignore reading as play of alternative interpretations, as skeptical inquiry, as genuine investigation.

Furthermore, critical thinking is potentially dangerous and might threaten our national health--our canons, our theories of education, even our politics and social structure, if we indeed create the reflective, competent citizens Brophy speaks about.

I explore these issues in the next section of my talk, on textbooks. By investigating their nature and function, I will show how the politics of critical thinking gets played out.

The dominion of textbooks. I use the word "dominion" specifically because textbook marketing is big business and politically loaded. The most egregious case I have unearthed was highlighted on NPR in February of this year. Texas and California form a central warehouse for national textbook production and distribution. There are outside consultant groups with requests which may or may not be considered such as creationism vs. evolution, the inclusion of Native American lore, etc. Texas and California's desires take precedence as does getting to press. However, a number of history textbooks (by major publishers) were analyzed for factual accuracy. Hundreds of errors were found, such as: the Korean War was ended by dropping the bomb, Sputnik was an intercontinental ballistic missile, Douglas McArthur led the House Unamerican Activities Committee in the '50s. Apparently, many of these could be explained through revision glitches: although questions had been changed, the corresponding answers had not. Revealing these errors made waves; Scott Forsman along with 3 other publishing houses were fined $240,000 and asked to clean up their acts. They did--sort of. Even after revision, 150 + errors remained. Basic error hinders critical thinking since background information is

obviously fundamental to critical thinking, although it is only one component.

More reliable textbooks and readers I examined gave a nod to critical thinking (devoting a few introductory pages to critical reading, analyzing, synthesizing), but never referred to it again. Questions following essays might be construed as higher order critical thinking skills, but then again they might not. Pedagogies are rarely offered. All too often, textbooks have merely undergone a facelift. Several titles such as Informal Logic and The Process of Argument claim a critical thinking method, but the term means little more than the usual problem-solving, decision making, inquiry strategies long appropriated in argument models. But, because critical thinking has become a movement, it is marketable.

The failure to transform critical thinking into more revolutionary pedagogies is, in part, political. John Patrick found that high school government texts foster passive transfer of facts and ideas in being encyclopedic and accomodating a national curriculum. He recommends that students learn to develop critical attitudes by applying issues of constitutional democracy to the real world.

However, the critical inquiry he advocates is often construed as dangerous. First, issue-centered classrooms emphasize controversy; many parents, according to Richard Gross, don't want their children to question traditional values, especially those related to their immediate community. And controversial issues are considered negative because they upset children--and we mustn't be upset.

Second, teachers are unprepared and uncomfortable with inquiry methods. Traditional textbooks and other materials, most readily available, are antithetical to issue-centered classrooms. They are fact

oriented, not problem oriented. Textbook teachers would have to significantly alter their pedagogies and design new materials. Then there is the issue of authority. Some teachers are intimidated if they don't have the right answer, and feel undermined in collaborative explorations of real problems. And finally, testing becomes more difficult. Objective questions would no longer be appropriate. Essays in which divergent perpsectives are considered may be the "test" of choice. Of course, writing is more time consuming.

Third, schools have traditions and administrations which are not easily changed. Even something as apparently minor as adopting a new handbook can create havoc. One institution I know is a case in point. While most of the faculty teach writing in stages, on computer, or collaboratively, and focus on critical reading, they are in the grip of the Harbrace Handbook, which is theoretically antiquated. **But**, teachers know right where to send students for comma splices, diction, etc., sending the message that grammatical concerns have the highest priority. Theory and practice are once again at odds. Administrations are invested in the business of bureaucracy. As Shaver says, "the school structure is set up to reward stability, not innovation and change." Re-examining the curriculum will undoubtedly cause a much greater disturbance than changing handbooks. And, inquiry methods might undermine the order and discipline in a classroom, administrators argue.

Despite these problems, the more courageous are inventing new pedagogies and designing research consistent with critical thinking theory. For instance, historians and political scientists have been questioning underlying assumptions in their fields, precipitating a debate over national unity versus pluralism. William Bigelow, after "stealing" a student's purse,

led his class into a discussion about Columbus' motives in *discovering* the new world. Playing with metaphorical meanings--stealing/discovery--the class questioned underlying social and cultural values. This inquiry led to a semester long investigation of textbooks: the validity of their claims and their biases. Students became skilled in close reading--examining narrator perspective, authorial voice and eventually evaluating national unity and even the teacher's methodology.

Composition theorists are also stirring the waters. Avon Crismore uses the textbook journal to promote critical thinking in a basic writing course. Students, through marginal comments, were asked to evaluate content, style, and function of several composition textbooks. The process enabled them to challenge authors' assumptions and conclusions and reflect on their own beliefs:

> The essays in this chapter seem to convey the writer's personal opinions in some areas. Is there any way to avoid this in an informative essay or is this inevitable?

This method eventually led to real world collaboration. The class's findings were shared with authors and publishers, who used the information to revise subsequent editions of their books.

I have tried to give a panoramic view--the worst to best scenarios--in critical thinking. Having considered these, I would like to conclude with some thoughts about critical thinking's future. If we are to experience any significant change, theories must be put into practice--at all levels of education. This may be ivory tower fantasizing. But I agree with Shaver who calls for reformers to "speak out . . .[against] the inertia that tends to dominate the schools." And some of us are "speaking" quietly but independently in our individual classrooms. Even some ACT assessment is

reflecting a critical thinking mood. Their COMP outcomes test for seniors asks students to synthesize procedural knowledge and apply it to real world decisions. In an essay form.

Critical thinking's future, I believe, depends on the strength of further inquiry. It is essential that we investigate our metaphors (like critical thinking, composing, revising) since they hide the gaps and contradictions we are invested in masking. Foucault calls these contradictions merely "the illusion of a unity." For instance, if I say writing is a process, I foreground a step-by step method--a particular something that sounds prescribed and linear. We know this to be false. And the notion of product, another particular something which gets graded--is concealed. Thus the contradiction.

We must hunt down and identify these contradictions and gaps. Are programs, texts, courses doing what they profess? Research must continue to ask such questions. Joseph Trimmer, in his 1987 empirical study assessing a large number of Basic Writing programs across the country, found that their courses focused primarily on basic skills. They claimed a critical thinking approach. By examining their materials (workbooks, worksheets), he found the contradiction.

I would like to see a similar study investigating teacher education programs. Do they employ critical thinking approaches? How many do and to what extent? Are teacher programs primarily training or education, and how are these terms defined? To what degree do methods courses drive curricula? At what levels of education are critical thinking approaches instituted? Where are they ethnographically?

We need empirical data on Writing-Across-the Curriculum programs, or writing to learn as it is now called. Is critical thinking learned in such

programs and how can we test for it? There still is no agreement on the validity of standardized critical thinking tests. ACT admits that theirs is basically a substitute for their reading comprehension exam.

Further research should reveal whether this movement is trickling down into the nooks and crannies where it is truly useful. While exploring this question, we must continue to reflect, clarify the waters, and create more enduring liferafts.

Annotated Bibliography

Critical Thinking Theory

Bruffee, Kenneth. "Social Construction, Language and the Authority of Knowledge: A Bibliographical Essay." College English 48 (1986): 773-790.
Drawing on Clifford Geertz and Richard Rorty, Bruffee claims that knowledge is disciplinary, that "fact, texts, selves, and so on [are] community generated." That is, knowledge is a social construct. As such, we become critical thinkers by "playing off alternatives against one another, rather than playing them off against criteria of rationality." The essay discusses composition studies and reading theories within this social constructionist framework.

McPeck, John E. Critical Thinking and Education. New York: St. Martin's Press, 1981.
An important critic of the critical thinking "movement," he argues (with Richard Ennis) that critical thinking is not equatable with formal logic, but encompasses other higher order concerns which are more complicated than "skills"--rather a mode of thinking which is not generalizable: transferable across domains. (For counter-arguments, see Richard Paul's "McPeck's Mistakes" in McPeck's Teaching Critical Thinking)

Quellmalz, Edys S. Designing an Integrated Instructional and Assessment System for Critical Thinking Skills. ERIC, 1984. ED 249 589
A comprehensive project involving the Pittsburgh public school system, this study traces and analyzes definitions and theories of critical thinking historically; it proposes a pedagogical program based on expressing and explaining an assertion; it constructs an assessment model based on interpretation and evaluation. A good overview. Bibliography reflects cognitive theory approach.

Siegel, Marie and Robert F. Carey. Critical Thinking: A Semiotic Perspective. Bloomington, IN: NCTE, 1989.
A provocative examination of critical thinking as dynamic and non-linear, as a process of reading signs and reaching new conclusions. Focuses on skepticism, reflection, and domain-specific knowledge. Doubt motivates inquiry when an anomaly is encountered, a situation which inspires a search for meaning, "not enduring truth."

Reading, Writing, and Critical Thinking

Bloome, et al. "Reading Instruction and Underlying Metaphors in Becoming a Nation of Readers." Counterpoint and Beyond: A Response to Becoming a Nation of Readers. Ed. Jane L. Davidson. Urbana: NCTE, 1988. 5-16.
The authors analyze this document which has alarmed educators and the populace, revealing common notions of what reading is. A Nation of Readers, in using metaphors for reading such as *journey* (suggesting a correct linear path with a specified goal), *training* (a skills approach), *input/output* (suggesting quality control), *business* (time-on-task)--ignores reading as negotiation, as social interaction between teacher and student, writer and audience. In short, these views are antithetical to critical thinking theory.

Flower, Linda. "Cognition, Context, and Theory Building." CCC 40 (1989): 282-311.
Using important aspects of critical thinking (hypothesizing, inquiry, significance of context), Flower re-examines the composing process. The paper itself demonstrates critical inquiry because it is driven by a hypothesis: how does context cue cognition? She concludes that the terms construct each other. We must teach students what terms like *evidence, results, validity* mean within any particular discipline.

Haas, Christina and Linda Flower. "Rhetorical Reading Strategies and the Construction of Meaning." CCC 39 (1988): 167-183.
The authors, through a think-aloud protocol, determine what *rhetorical strategy* means for novice and expert readers. Novices view reading as understanding words, paraphrasing, and recognizing conventions and structures (paragraphs, topic sentences, generalizations, detail); their content/information process is not rhetorical. However,experts construct meaning by creating a hypothesis, which consists of context, function, readers' beliefs, contradictions and uncertainties. While the authors conclude that students must learn rhetorical strategies to become critical readers, they offer no pedagogical solutions.

Tierney. R. J. et al. "The Effects of Reading and Writing upon Thinking Critically." Reading Research Quarterly 24 (1989): 134-169.
An empirical study which investigates whether "writing in combination with reading prompts more critical thinking than reading alone, writing alone, or either activity combined. . ."

The study was based entirely on student writing. Critical thinking was defined to a large extent as metacognition: thinking from different perspectives, then contemplating the *nature* of one's thoughts, doubting and inquiring: as evaluating what is read: as maintaining authority (refusing to give it over to the text). The authors concluded that reading and writing in combination foster critical thinking; students did more revising (additions, deletions, substitutions) and higher quality drafts, and the thinking was more dialectic.

Theory into Practice: Pedagogical Applications

Brophy, Jere. "Teaching Social Studies for Understanding and Higher-Order Applications." Elementary School Journal Mar. (1990): 351-417.

A social constructionist perspective, this extensive article is useful for designing a *model* for critical thinking. Its rigorous attention to definitions, discussion of disciplinary and inter-disciplinary concerns and pedagogical applications are exemplary. In the case of social studies, the focus of the article, experts generally agree that knowledge should be organized around powerful concepts like rules and norms, change, values, issues. Brophy's method itself reflects critical inquiry; he states that certain criteria are needed to delineate and justify these powerful concepts. Is the concept generalizable from a great number of examples, is it valid in terms of agreed upon definitions? Is it contemporaneous? Each criterion is considered in terms of its advantages and disadvantages. Such inquiry, he claims, generates theory-based curricula which will result in creating citizens who are competent, reflective, and concerned (these terms are defined) and who can apply knowledge to a variety of issues and tasks.

Storinger, Richard and Lorenz Boehm. Critical Literacy Project. ERIC, 1988. ED 317 243

Report of a year-long faculty development seminar designed to promote critical reading, writing, and thinking at Oakton Community College in Illinois. This document addresses how theory is translated into classroom methodology more directly and effectively than other studies I examined. It focuses on how to foster more independent learning, WAC programs, and better strategies for teaching reading and writing. The project culminated in a survey (of teachers), a 30 minute promotional videotape, a national conference, collaboration with the public school system, and greater enthusiasm and commitment from teachers.

Texts

Bigelow, William. "Discovering Columbus: Rereading the Past. Language Arts 66 (1989): 635-643.

Based on Freirian model, author begins class by "stealing" a student's purse--leading to assumptions about "discovery." Students then critically examine "innocent" stories of earlier classroom histories: what were Columbus' real motives, how factual were the accounts, whose perspective is prominent? Students began to read skeptically, which student samples of writing demonstrate. Evidence of thoughtful, close reading. **However**, the politically correct attitude is Bigelow's: students led to imitate his view. Is critical thinking as objective as the term implies? To author's credit, one of student excerpts questions **Bigelow**'s method and assumptions.

Crismore, Avon. Initiating Students into Critical Thinking, Reading, and Writing about Texts. ERIC, 1987. ED 288 202

Outlines the need for new critical thinking practices, and provides a model for **basic writers**: making marginal notes in "theory-based/research-based [composition] textbooks," although there is no further definition of such texts. Based on philosophy that critical thinking is taught within a content area, Crismore's method led to students' re-evaluation of themselves, their teachers, the authors of textbooks and publishing strategies. The latter two were seriously considered by experts.

McAninch, Stuart A. "The Educational Theory of Mary Sheldon Barnes: Inquiry Learning as Indoctrination in History Education." Educational Theory 40 (1990): 45-52.

A historical overview of history curricula and texts (secondary schools) from late 19th century. Highlights ongoing debate over national unity vs. pluralism. Uses Barnes to argue value of inquiry as a tool for analysis, synthesis and spirituality **but** criticizes her for using CT methods to find "objective truths about human progress and the proper civic roles of Americans. . ." McAninch claims that historical scholarship is still plagued with this problem. However, her pluralistic approach, now politically correct, might be considered just as subjective as Barnes'.

Patrick, John J. High School Government Textbooks. ERIC, 1988.
Examines the characteristics, weaknesses, criticisms in treatment of Constitution in government texts, and offers. recommendations. Short but insightful article showing that the tendency to be encyclopedic and adjust to a national curriculum leads to passive transfer of facts and ideas. Students not encouraged to develop critical attitudes or use information in real world. Recommendations: stress **concepts** of constitutional democracy which will be thematic throughout; use case studies for dramatic effect; teach higher order skills of critical thinking to promote values and issues of constitutional democracy.

Sullivan, Laura A. Public Speaking and Library Research: Textbook's Responsibilities. ERIC, 1989. ED 314 803
An interdisciplinary approach to critical thinking, the author being both reference librarian and speech instructor. Each of 9 speech texts, focusing on library research, failed to emphasize critical thinking skills because they used a list approach, thus falsely perpetuating the myth that piling up information makes for good speeches. The availability of online searches suggests that computers can do the work; texts, however, cannot **evaluate** and **interpret** information, a higher order critical thinking skill. Student speeches are dull as a result.